

SELECTED INFECTIOUS DISEASES OF CHILDREN

PRINCIPAL MODE OF SPREAD	DISEASE	CAUSE	SYMPTOMS/SIGNS	INCUBATION PERIOD	EXCLUSION GUIDELINES
AIRBORNE AND RESPIRATORY (Disease germs are spread by droplets from nose, throat, and mouth by sneezing, coughing, and speaking)	Chickenpox	Varicella zoster, a member of the herpesvirus family	Fever and skin rash that comes in crops. Rash begins on the chest, back, under arms, neck and face; changes to blisters, and then scabs.	Usually 14 - 16 days; can be as long as 3 weeks.	Until blisters have dried, usually 6 days.
	Cytomegalovirus (CMV) Infection	A member of the herpesvirus family	Most people have no symptoms. Occasionally there are temporary symptoms that include fever, sore throat, tiredness and swollen glands.	Unknown, probably 3-12 weeks for infections acquired at birth.	No exclusion necessary.
	Viral (Aseptic) Meningitis Enterovirus (Nonpolio) Infection	Coxsackievirus, echovirus, and enterovirus	Cold-like symptoms, sore throat, mouth sores, fever, rash, vomiting and diarrhea. Some people have no symptoms. Some children may have symptoms of meningitis.	3-6 days.	<u>For diarrhea</u> , Children with uncontained diarrhea should be excluded. No exclusion for cold-like symptoms if child is well enough to participate. <u>Viral meningitis</u> – exclude until physician decides child can return to normal activities.
	Fifth Disease	Human parvovirus B19	Rarely any symptoms other than a rash (slapped cheek) that begins on cheeks; later found on arms, legs, upper body, and buttocks. Rash is very fine, lacy, pink and tends to come and go in sunlight or heat.	4-14 days; can be as long as 21 days.	No exclusion necessary if fever is not present and other rash causing illnesses are ruled out.
	<i>Haemophilus influenza</i> Disease, Invasive (Hib)	<i>Haemophilus influenzae</i> type b bacteria	Meningitis - Unusual sleepiness fever, stiff neck, vomiting, irritability, lack of appetite. (See <i>Haemophilus influenza</i> Disease Fact Sheet for symptoms of other infections)	Unknown; probably about 2-4 days.	Until child has been treated and is well enough to participate in normal daily activities. Rifampin should also be given before child returns.
	Hand, Foot, and Mouth Disease	Coxsackievirus	Sores toward the front of the mouth, on the sides of the tongue, inside the cheeks and on the gums and may last 7-10 days. In most cases, sores can be found on the palms of the hands, the fingers and the soles of the feet. A low-grade fever may last 1-2 days.	Usually 3-5 days.	Until fever is gone and child is well enough to participate in normal daily activities. Sores may still be present.
	Influenza	Influenza A and B virus	Sudden onset of fever with chills, headache, muscle aches, sore throat and non-productive cough.	Usually 1-3 days.	Until person is without fever for 24 hours.

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AIRBORNE AND RESPIRATORY (Disease germs are spread by droplets from nose, throat, and mouth by sneezing, coughing, and speaking)	Measles (Rubeola)	Measles virus	Fever (101° F or greater), watery eyes, runny nose and cough prior to a red blotchy rash appearing on the 3 rd to 7 th day. Rash usually begins on the face, spreads down the trunk and out the extremities and lasts 4-7 days.	8-12 days. Average interval from exposure to appearance of rash is 14 days.	Until 4 days after rash appears.
	Meningococcal Disease	<i>Neisseria meningitidis</i> bacteria	Bacteremia: Sudden onset of fever, chills, tiredness; sometimes a rash. Meningitis: Fever, vomiting, headache, stiff neck, irritability, lack of appetite; sometimes a rash or seizures.	1-10 days; usually less than 4 days.	Until child has been treated and is well enough to participate in normal daily activities. Rifampin should also be given before child returns. An exposed child or staff shall be excluded until preventative treatment has been started.
	Mumps	Mumps virus	Not all people have symptoms. When symptoms occur, they usually consist of swollen glands in front of and below the ear, headache, slight fever and earache.	12-25 days; usually 15-18 days.	Until 9 days after swelling begins.
	Pertussis (Whooping Cough)	<i>Bordetella pertussis</i> bacteria	Runny nose, sneezing, low-grade fever and a mild cough. After a week or two, a persistent cough develops and occurs in explosive bursts, sometimes ending with a high-pitched whoop and vomiting. Coughing attacks continue up to 10 weeks and are more common at night.	6-20 days; usually 7-10 days.	Until 5 days after treatment begins or for 4 weeks after intense coughing begins.
	Pneumococcal Infections	<i>Streptococcus pneumoniae</i> bacteria	Sudden onset of shaking chill, fever, chest pain, difficulty breathing, and cough with possible rusty-colored sputum. Fever, vomiting, and convulsions may be the first symptoms in infants and young children.	Unknown, probably 1-3 days.	Until the child has been treated, fever is gone, and the child is well enough to participate in normal activities.
	Respiratory Infections (Viral)	Different viruses	Runny nose, sneezing, chills, tiredness, fever, muscle aches, sore throat, cough which may last 2-7 days.	Colds: 1-3 days. Other acute respiratory illness: up to 8 days.	Until fever is gone and child is well enough to participate in normal daily activities.
	Respiratory Syncytial Virus (RSV)	RSV virus	Fever, cough, watery eyes, runny nose and sneezing. Very young infants may have tiredness, irritability and loss of appetite, with few respiratory signs.	2-8 days; usually 4-6 days.	Until fever is gone and child is well enough to participate in normal daily activities.

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AIRBORNE AND RESPIRATORY (Disease germs are spread by droplets from nose, throat, and mouth by sneezing, coughing, and speaking)	Roseola	Human herpesvirus-6	Sudden onset of fever (may reach 104° F or higher), rash may appear as fever subsides on 3 rd or 5 th day. The rash usually begins on the chest and abdomen lasting 1-2 days.	9 to 10 days.	Provided other rash illnesses are ruled out, child may return when he/she is without fever.
	Rubella (German Measles)	Rubella virus	Rash, low-grade fever, and swollen glands behind the ears. May be a very mild illness with no rash. Adults may have aching joints.	2-3 weeks; usually 16-18 days.	Until 7 days after the rash appears.
	Streptococcal Sore Throat / Scarlet Fever	Group A <i>Streptococcus</i> bacteria	Sudden onset of fever, sore throat, swollen glands, headache, abdominal pain, nausea, and vomiting in severe cases. With scarlet fever a very fine raised rash is present. A fuzzy, white tongue may occur. The rash appears most often on the neck, chest, in folds of the armpit, elbow, groin and in the inner thigh. Later on there may be peeling of the skin on the fingertips and toes.	Usually 1-3 days.	Until 24 hours after treatment begins and the fever is gone.
	Tuberculosis (TB)	<i>Mycobacterium tuberculosis</i> bacteria	Tiredness, weight loss, fever, and night sweats. TB of the lung may include cough, chest pain, and possibly coughing up blood.	See Tuberculosis Fact Sheet.	<u>Probable or confirmed TB disease:</u> Until a physician states patient or child is not contagious. A person with a positive skin test and no symptoms need NOT be excluded but should see his physician. A person with probable or confirmed active TB disease should be excluded until a physician states he is not contagious.

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BLOOD / BLOODY BODY FLUID CONTACT (Into fresh cuts, opening of the skin, or splashes on mucous membranes [eyes, mouth])	Hepatitis B	Hepatitis B virus	Loss of appetite, tiredness, abdominal pain, nausea, vomiting, and rash. Jaundice (yellowing of eyes or skin) may be present. Symptoms vary greatly from none at all to severe illness.	6 weeks to 6 months; average 3 months.	See Hepatitis B Fact Sheet.
	Human Immunodeficiency Virus (HIV) Infection	Human Immunodeficiency Virus	The virus commonly attacks the immune system, leaving people susceptible to a variety of infections. Symptoms will depend on the type of infection and in children, there may be no symptoms or symptoms such as persistent diarrhea, fever or weight loss (failure to thrive).	Unknown: from less than 6 months to longer than 15 years. The incubation may be found to be longer as we gain more experience with the disease.	See HIV Fact Sheet.
DIRECT CONTACT (Direct contact with skin saliva, urine, or discharge from an infected person)	Conjunctivitis (Pinkeye)	Bacteria or viruses	<u>Bacterial</u> : pink or red conjunctiva with pus that causes matting, pain, or redness of eyelids. <u>Viral</u> : pink conjunctiva with clear watery discharge without fever, pain, or redness of eyelids.	1-3 days.	<u>Bacterial</u> (with pus): until examined by his/her physician, treated for 24 hours, and approved for readmission by physician. <u>Viral</u> (without pus): No exclusion.
	Cytomegalovirus (CMV) Infection	A member of the herpesvirus family	Most people have no symptoms. Occasionally these are temporary symptoms that include fever, sore throat, tiredness and swollen glands.	Unknown; probably 3-12 weeks for infections acquired at birth.	No exclusion necessary.
	Impetigo	<i>Streptococcus</i> & <i>Staphylococcus</i> bacteria	Sores that form an oozing, sticky yellow crusts; itching.	Usually 1-10 days.	Until person has been treated with antibiotic for 24 hours and the person no longer has a discharge.
	Influenza	Influenza A & B virus	Sudden onset of fever with chills, headache, muscle aches, sore throat and non-productive cough.	Usually 1-3 days.	Until person is without fever for 24 hours.
	Lice (Head)	<i>Pediculus humanus capitis</i> , a louse	Itching of the scalp. Look for 1) crawling lice in the hair 2) eggs (nits) glued to the hair near the scalp and 3) scratch marks on scalp or back of neck at hairline.	Not applicable.	Exclusion is not necessary. Child may return after first treatment is completed.
	Mononucleosis (Infectious)	Epstein-Barr virus	Fever, sore throat, tiredness, and swollen glands (especially behind the neck). Sometimes there is a rash.	4-6 weeks.	Until the child is well enough to participate in normal daily activities.
	MRSA (Methicillin-resistant <i>Staphylococcus aureus</i>)	Methicillin-resistant <i>Staphylococcus aureus</i>	Red bumps, pus-filled boils, abscesses, cellulitis. Similar to impetigo or non-resistant <i>Staphylococcus aureus</i> infection	Unknown	Exclusion is not necessary. Open sores should be covered. Standard infection control measures are appropriate.

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DIRECT CONTACT (Direct contact with skin saliva, urine, or discharge from an infected person)	Oral Herpes (Cold sores)	Herpes simplex virus type I	Cold sores (fever blisters) appear on the lips and face; less often in the mouth. Sores usually crusts and heal within a few days.	2-12 days.	Exclude a child with open blister or mouth sores only if the child is a biter, drools uncontrollably or mouths toys other children may put it in their mouths. Do not kiss the child or allow child to kiss others where direct contact with sores may occur.
	Pinworms	<i>Enterobius vermicularis</i> , an internal parasite, a roundworm	Rectal itching, especially at night; irritability; disturbed sleep, grinding of teeth at night, weight loss, nighttime bedwetting.	2-6 weeks.	Until 24 hours after treatment has been started.
	Pneumococcal Infections	<i>Streptococcus pneumoniae</i> bacteria	Sudden onset of shaking chill, fever, chest pain, difficulty breathing, and cough with possible rusty-colored sputum. Fever, vomiting, and convulsions may be the first symptoms in infants and young children.	Unknown, probably 1-3 days.	Until the child has been treated, fever is gone, and the child is well enough to participate in normal activities.
	Ringworm (Tinea)	A fungus	<u>Body</u> : Ringworm appears as flat, spreading ring-shaped lesions. The edge of the lesion may be dry and scaly or moist and crusty. As the lesion spreads outward, the center often becomes clear. <u>Scalp</u> : Ringworm may be hard to detect in the early stages. It often begins as a small scaly patch on the scalp. Mild redness and swelling may occur. Infected hairs become brittle and break off easily.	Unknown. Unknown.	Until 24 hours after treatment has been started and the lesion has started to shrink.
	Scabies	<i>Sarcoptes scabiei</i> , a mite	Rash and intense itching which may be more severe at night. Common locations to see the rash are folds of skin between fingers, around wrists, elbow, and armpits. Other areas where rash may appear are knees waistline, thighs, male genitals, abdomen, chest, and lower portion of buttocks. Infants may be infected on head, neck, palms, and soles of feet.	4-6 weeks; Symptoms may appear in 1-4 days if the person has had scabies before.	Until 24 hours after effective treatment has been given.

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DIRECT CONTACT (Direct contact with skin saliva, urine, or discharge from an infected person)	Shingles	Varicella-zoster; a member of the herpesvirus family	Severe pain and numbness along nerve pathways, often on the face or mid-line area of the trunk.	None.	Until sores can be covered or have crusted over and dried.
	Yeast Infections	<i>Candida albicans</i> , a yeast	Mouth: White, slightly raised patches that may begin on the tongue or inside the cheek (also called Oral Thrush). Diaper area: A smooth, shiny “fire engine” red rash.	Variable: 2-5 days for thrush in infants.	No exclusion necessary if the child is able to participate comfortably in normal activities.
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FECAL ORAL (Ingestion of contaminated food or drink, or by placing hands or objects contaminated with stool in the mouth.)	Campylobacteriosis	Different <i>Campylobacter</i> species; bacteria.	Diarrhea (often bloody), abdominal pain, fever, nausea and vomiting.	1-10 days; usually 2-5 days.	Until diarrhea has stopped.
	Cryptosporidiosis	<i>Cryptosporidium parvum</i> , a one-celled organism	Frequent watery diarrhea, and low-grade fever are most common symptoms. Other symptoms are abdominal pain, weight loss, nausea, and vomiting. Some children may show mild symptoms or no symptoms at all.	2-14 days, usually 7 days.	Until diarrhea has stopped.
	<i>E. coli</i> O157:H7	<i>Escherichia coli</i> O157:H7 bacteria	Ranges from no symptoms to diarrhea to bloody diarrhea with abdominal cramps and low-grade fever.	2-8 days; usually 3-4 days.	Until diarrhea stops and 2 stool cultures, obtained at least 1 day apart, are negative.
	Viral (Aseptic) Meningitis. Enterovirus (Non-polio) Infection	Coxsackievirus, echovirus, and enterovirus	Cold-like symptoms, fever, sore throat, mouth sores, rash, vomiting and diarrhea. Some people have no symptoms. Some children may have symptoms of meningitis.	3-6 days.	For diarrhea, Children with uncontained diarrhea should be excluded. No exclusion for cold-like symptoms if child is well enough to participate in activities. <u>Viral meningitis</u> – exclude until physician decides child can return to normal activities.
	Giardiasis	<i>Giardia lamblia</i> , a parasite	Gas, stomach cramps and bloating, nausea, sudden watery and foul smelling diarrhea, and weight loss. Very often children are infected and show no symptoms.	3-25 days; usually 7-10 days.	Exclude until diarrhea has stopped.

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FECAL ORAL (Ingestion of contaminated food or drink, or by placing hands or objects contaminated with stool in the mouth.)	Hand, Foot and Mouth Disease	Coxsackievirus	Sores toward the front of the mouth, on the sides of the tongue, inside the cheeks and on the gums and may last 7-10 days. In most cases, sores can be found on the palms of the hands, the fingers and the soles of the feet. A low-grade fever may last 1-2 days.	Usually 3-5 days.	Until fever is gone and child is well enough to participate in normal daily activities. Sores may still be present.
	Hepatitis A	Hepatitis A virus	Onset is usually sudden, with loss of appetite, nausea, tiredness, and fever. Stomach ache. Dark-colored urine, light-colored stools and jaundice (yellowing of eyes or skin) may appear a few days later. Jaundice occurs more often among adults than children. Symptoms vary greatly from severe to none at all.	2-6 weeks; usually one month.	Until 1 week after onset of illness or jaundice.
	Norovirus	Norovirus	Sudden onset of nausea, vomiting (sometimes violent), and stomach cramping. Sometimes a low-grade fever, chills, headache, muscle aches, and general tiredness can be present. Illness starts suddenly and resolves in 1-2 days.	Usually 24-48 hours, but can be as early as 12 hours.	None. However, norovirus is highly contagious and difficult to control. Contact the local health department for assistance with cleaning of vomit in a common area due to suspected norovirus. (See also the fact sheet.)
	Rotavirus Infection	Rotaviruses	Vomiting, fever, and watery diarrhea. Sometimes a cough, runny nose, or ear infections are present. Many children have no symptoms.	2-4 days.	Until diarrhea has stopped.
	Salmonellosis	<i>Salmonella</i> bacteria	Diarrhea, cramps, nausea, headache, fever, and sometimes vomiting. Infection can occur without symptoms.	6-72 hours; usually 12-36 hours.	Until diarrhea has stopped.
	Shigellosis	<i>Shigella</i> bacteria	Diarrhea (either watery or with blood and mucus), cramps, fever, nausea and sometimes vomiting. Infection can occur without symptoms.	1-7 days; usually 2-4 days.	Contact the Douglas County Health Department (402.444.7214) for assistance with exclusion. Attendees who have been on an appropriate antibiotic for 48 hours may return 24 hours after symptoms resolve. (See Fact Sheet)